This document is scheduled to be published in the Federal Register on 04/16/2013 and available online at <a href="http://federalregister.gov/a/2013-08815">http://federalregister.gov/a/2013-08815</a>, and on <a href="mailto:FDsys.gov">FDsys.gov</a>

Billing Code 4310–55

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS-R8-ES-2013-N031]

[80221-1113-0000-C2]

Endangered and Threatened Wildlife and Plants; Revised Recovery Plan for Lost

**River Sucker and Shortnose Sucker** 

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of document availability.

**SUMMARY:** We, the Fish and Wildlife Service, announce the availability of the final

revised recovery plan for Lost River sucker (Deltistes luxatus) and shortnose sucker

(Chasmistes brevirostris), two endangered fish species found in only a few lakes and

reservoirs in the upper Klamath Basin and Lost River sub-basin in southern Oregon and

northern California. The recovery plan includes recovery objectives and criteria, and

specific actions necessary to achieve downlisting and delisting from the Federal List of

1

Endangered and Threatened Wildlife and Plants. We revised this plan because a substantial amount of new information is available related to recovery of both species, making it appropriate to incorporate that new information into the recovery program.

**ADDRESSES:** You may obtain a copy of the revised recovery plan from our website at http://www.fws.gov/endangered/species/recovery-plans.html. Alternatively, you may contact the Klamath Falls Fish and Wildlife Office, U.S. Fish and Wildlife Service, 1936 California Avenue, Klamath Falls, OR 97601 (telephone 541–885–8481).

**FOR FURTHER INFORMATION CONTACT:** Laurie Sada, Field Supervisor, at the above address or telephone number.

## **SUPPLEMENTARY INFORMATION:**

## **Background**

Recovery of endangered or threatened animals and plants to the point where they are again secure, self-sustaining members of their ecosystems is a primary goal of our endangered species program and the Endangered Species Act of 1973, as amended (Act; 16 U.S.C. 1531 *et seq.*). Recovery means improvement of the status of listed species to the point at which listing is no longer appropriate under the criteria specified in section

4(a)(1) of the Act. The Act requires the development of recovery plans for listed species, unless such a plan would not promote the conservation of a particular species.

The Lost River sucker (*Deltistes luxatus*) and shortnose sucker (*Chasmistes brevirostris*) are two species of fish that inhabit a limited number of lakes in southern Oregon and northern California. We listed these species as endangered throughout their entire range under the Act on July 18, 1988 (53 FR 27130). The first recovery plan for the species was published on March 17, 1993 (USFWS 1993, pp. 1–108). However, since a substantial amount of additional information is now available, it is appropriate to revise the plan and incorporate this new information into the recovery program.

Section 4(f) of the Act requires us to provide an opportunity for public review and comment prior to finalization of recovery plans, including revisions to such plans. We made the draft of this revised recovery plan available for public comment from October 18, 2011 through December 19, 2011 (76 FR 64372). We considered all information we received during the public comment period and revised the recovery plan accordingly.

## **Species Information**

Lost River and shortnose suckers are very similar in ecology. They both predominantly inhabit lake environments but also periodically utilize other aquatic habitats. Both species spawn during spring over gravel bottoms in tributary streams and rivers (Buettner and Scoppettone 1990, pp. 19–20, 44–46). A relatively small, but significant, number of Lost River sucker also spawn over gravel bottoms at shoreline

springs or upwellings along the margins of Upper Klamath Lake (Janney *et al.* 2009, pp. 8–9). Larvae spend little time in rivers or streams after hatching, drifting passively to downstream lakes within a few days (Cooperman and Markle 2003, p. 1138). Once in a lake environment, larvae move into shallow, vegetated areas along the shoreline. This vegetation provides cover from predators, protection from currents and turbulence, and food sources (Cooperman and Markle 2004, p. 365). Within one to two months, larvae become juveniles and begin to utilize non-vegetated, deeper off-shore areas (Burdick *et al.* 2008, p. 417). Adults occupy open water habitats throughout the year, except during spawning season, when they migrate to spawning areas. Individuals typically become reproductively mature at 4 to 7 years old, and can live for several decades.

The rationales for listing Lost River sucker and shortnose sucker were similar, and many of the same threats continue, such that both species remain in danger of extinction. Habitat loss, including restricted access to spawning and rearing habitat, severely impaired water quality, and increased rates of mortality resulting from entrainment in water management structures, were cited as causes for declines in populations prior to listing (53 FR 27130; July 18, 1988). Although the rate of habitat loss has slowed in recent years, and a significant amount of habitat restoration and screening of water diversion structures has occurred, large amounts of historical sucker habitat remain unavailable or significantly altered. In Upper Klamath Lake, extremely poor water quality, which occurs periodically throughout the summer, negatively impacts adult survival rates, and although the specific causes are currently unknown, juvenile

survival is also low in these populations. The last time a substantial group of juveniles joined the adult populations in Upper Klamath Lake was during the late 1990s (Janney *et al.* 2008, pp. 1820–1823). For both species, these factors resulted in abundances of spawning individuals in 2007 in Upper Klamath Lake that were roughly 40 to 70 percent of their 2001 levels. Furthermore, entrainment of larvae and small juveniles through diversion structures continues to drain significant numbers of individuals from productive populations into extremely poor habitats, from which return is unlikely. Clear Lake Reservoir has a single spawning tributary with poor connectivity when reservoir levels are low and limited passage for spawning migrants when flows are low, making these populations very vulnerable to drought. Morphological and molecular genetics research indicate that hybridization occurs between shortnose sucker and Klamath largescale suckers throughout the range of shortnose sucker. However, further studies are needed to determine the extent and causes of hybridization.

## **Recovery Plan Objectives and Criteria**

The purpose of a recovery plan is to provide a framework for the recovery of species so that protection under the Act is no longer necessary. A recovery plan includes scientific information about the species and provides criteria that enable us to gauge whether downlisting or delisting the species is warranted. Furthermore, recovery plans help guide our recovery efforts by describing actions we consider necessary for each

species' conservation and by estimating time and costs for implementing needed recovery measures.

The revised recovery plan contains the following objectives for recovery, which we believe will promote healthy, stable populations of these species:

- Restore or enhance spawning and nursery habitat in Upper Klamath Lake and Clear Lake Reservoir systems;
- 2. Reduce negative impacts of poor water quality;
- 3. Clarify and reduce the effects of non-native organisms on all life stages;
- 4. Reduce the loss of individuals to entrainment;
- 5. Establish a redundancy and resiliency enhancement program;
- 6. Maintain or increase larval production;
- 7. Increase juvenile survival and recruitment to spawning populations; and
- 8. Protect existing and increase the number of recurring, successful spawning populations.

As these species meet reclassification and recovery criteria, we review each species' status and consider each species for reclassification on or removal from the Federal List of Endangered and Threatened Wildlife and Plants.

	41	• 4
Δ	nth	ority
1	uui	OLILY

We developed our recovery plan under the authority of section 4(f) of the Act, 16 U.S.C. 1533(f). We publish this notice under section 4(f) Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

April 8, 2013	
Dated:	
Alexandra Pitts	

**Pacific Southwest Region** 

Acting Regional Director,

[FR Doc. 2013-08815 Filed 04/15/2013 at 8:45 am; Publication Date: 04/16/2013]